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INTELLECTUAL PROPERTY

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EUROPEAN PATENT OFFICE  
P.B. 5818 Patentlaan 2  
NL-2280 HV Rijswijk - Pays Bas

Re: International Patent Application N. PCT/EP2004/013720 filed on December 2, 2004 in  
the name of Metlac S.p.A.  
Our Ref.: GL/ag PCT 2409

Dear Sirs,

We answer to the Written Opinion of the International Searching Authority issued on  
March 15, 2005.

In document D1 the electrical discharge supplied to the electrode is between 10 and 15 kV; this range does not overlaps with the range of 17 to 49 kV of the present case.

The description says that the voltage is above 5 kV but, in view of the fact that the best results are obtained between 10 and 15 kV, nothing let suppose that also with discharges above 15 KV some results can be achieved, but only from 5 to 15 kV.

Furthermore, concerning the frequency, in the present case, particularly good result are achieved with a frequency of 22 KHz or more.

Therefore, we file amended claim 1 in which the range of frequency is 20 KHz to 24 KHz.

You understand that to obtain particularly good results the combination of both the voltage and the frequency is fundamental and not one of them independently from the other one.

The range of this two values as now claimed in claim 1 is not known and, in our opinion, is also is inventive in respect to the cited prior art.

Yours faithfully

Ing. Barzanò & Zanardo  
Girogio Lotti

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- 1) A method for the surface treatment of a metal substrate, consisting in applying, using an electrode, an electrical discharge having a voltage of between 17,000 V and 49,000 V and a frequency of between 22 kHz and 24 kHz on the surface of the metal substrate, whether previously painted or not, to be treated.
- 2) The method according to Claim 1, characterized in that the voltage generated is approximately 30,000 V.
- 3) The method according to Claim 1, characterized in that the frequency used is approximately 22 kHz.
- 4) The method according to any one of the preceding claims, in which the metal substrate is previously painted.
- 5) The method according to Claim 4, in which the paint that coats the metal substrate is further coated by means of lithography, ink printing.
- 6) The method according to the preceding claims, in which the metal substrate is not previously painted.
- 7) A device for the surface treatment of a metal substrate according to the method as per Claims 1 to

3, characterized in that the electrode is constituted by a conductive rod made of stainless steel or aluminium coated with a layer of insulating ceramic material.

8) A metal substrate, in particular for the packaging of foodstuffs, whether previously painted or not treated, according to the method referred to in Claims 1 to 6 and with the device according to Claim 7.